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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/915,182

DATE: 08/02/2001

TIME: 10:47:18

Input Set : A:\PTO\_VSK.txt

Output Set: N:\CRF3\08022001\I915182.raw

ENTERED

3 <110> APPLICANT: Dehesh, Katayoon

5 <120> TITLE OF INVENTION: NUCLEIC ACID SEQUENCES ENCODING BETA KETOACYL-ACP SYNTHASE

AND USES

6 THEREOF

8 <130> FILE REFERENCE: MTC 6796

C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/915,182

C--> 10 <141> CURRENT FILING DATE: 2001-07-25

10 <150> PRIOR APPLICATION NUMBER: US 60/220,702

11 <151> PRIOR FILING DATE: 2000-07-25

13 <160> NUMBER OF SEQ ID NOS: 6

15 <170> SOFTWARE: PatentIn version 3.0

17 <210> SEQ ID NO: 1

18 <211> LENGTH: 1275

19 <212> TYPE: DNA

20 <213> ORGANISM: Synechocystis sp.

22 <400> SEQUENCE: 1

23	ggatccgcat	gcatggcaaa	tttggaaaag	aaacgtgttg	ttgtaacggg	attgggagcc	60
25	atcaccceca	tcggtaatat	tctccaagac	tattggcaag	gcttaatgga	gggtcgtaac	120
27	ggcattggcc	ccattaccgc	tttcgatgct	agtgaccaag	cctgccgttt	tggaggggaa	180
29	gtaaaggatt	ttgatgctac	ccagtttctt	gaccgcaaa	aagctaaacg	gatggaccgg	240
31	ttttgccatt	ttgctgtttg	tgccagtcaa	caggcaatta	acgatgctaa	gttggtgatt	300
33	aacgaactca	atgccgatga	aatcggggta	ttgattggca	cgggcattgg	tggtttgaaa	360
35	gtactggaag	atcaacaaac	cattctgttg	gataagggtc	ctagccgttg	cagtcctttt	420
37	atgatcccga	tgatgatcgc	caacatggcc	tctgggttaa	ccgccatcaa	cttagggggc	480
39	aagggtccca	ataactgtac	ggtgacggcc	tgtgcggcgg	gttccaatgc	cattggagat	540
41	gcgttttcgt	tggtgcaaaa	tggctatgct	aaggcaatga	tttgcgggtg	cacggaagcg	600
43	gccattaccc	cgctgagcta	tgcaggtttt	gcttcggccc	gggctttatc	tttccgcaat	660
45	gatgatcccc	tccatgccag	tcgtcccttc	gataaggacc	gggatggttt	tgtgatgggg	720
47	gaaggatcgg	gcattttgat	cctagaagaa	ttggaatccg	ccttgggccc	gggagcaaaa	780
49	atztatgggg	aaatggtggg	ctatgccatg	acctgtgatg	cctatcacat	taccgccccca	840
51	gtgccgggat	gtcggggagc	caccaggggc	atcgccctgg	ccttaaaaga	cagcggattg	900
53	aaaccggaaa	tggtcagtta	catcaatgcc	catggtacca	gcacccctgc	taacgatgtg	960
55	acggaaaacc	gtgccattaa	acaggcgttg	ggaaatcatg	cctacaatat	tgcggttagt	1020
57	tctactaagt	ctatgaccgg	tcaactgttg	ggcggctccg	gaggtatcga	agcgggtggc	1080
59	accgtaatgg	cgatcgccga	agataaggta	ccccccacca	ttaatttgga	gaaccccgac	1140
61	cctgagtgtg	atattggatta	tgtgccgggg	cagagtcggg	ctttaatagt	ggatgtagcc	1200
63	ctatccaact	cctttggttt	tggtggccat	aacgtcacct	tagctttcaa	aaaatatcaa	1260
65	tagaagcttg	gatcc					1275

68 <210> SEQ ID NO: 2

69 <211> LENGTH: 416

70 <212> TYPE: PRT

71 <213> ORGANISM: Synechocystis sp.

73 <400> SEQUENCE: 2

75	Met	Ala	Asn	Leu	Glu	Lys	Lys	Arg	Val	Val	Val	Thr	Gly	Leu	Gly	Ala
76	1				5					10					15	
78	Ile	Thr	Pro	Ile	Gly	Asn	Thr	Leu	Gln	Asp	Tyr	Trp	Gln	Gly	Leu	Met
79				20					25					30		
81	Glu	Gly	Arg	Asn	Gly	Ile	Gly	Pro	Ile	Thr	Arg	Phe	Asp	Ala	Ser	Asp

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82          35          40          45
84 Gln Ala Cys Arg Phe Gly Gly Glu Val Lys Asp Phe Asp Ala Thr Gln
85          50          55          60
87 Phe Leu Asp Arg Lys Glu Ala Lys Arg Met Asp Arg Phe Cys His Phe
88 65          70          75          80
90 Ala Val Cys Ala Ser Gln Gln Ala Ile Asn Asp Ala Lys Leu Val Ile
91          85          90          95
93 Asn Glu Leu Asn Ala Asp Glu Ile Gly Val Leu Ile Gly Thr Gly Ile
94          100          105          110
96 Gly Gly Leu Lys Val Leu Glu Asp Gln Gln Thr Ile Leu Leu Asp Lys
97          115          120          125
99 Gly Pro Ser Arg Cys Ser Pro Phe Met Ile Pro Met Met Ile Ala Asn
100          130          135          140
102 Met Ala Ser Gly Leu Thr Ala Ile Asn Leu Gly Ala Lys Gly Pro Asn
103 145          150          155          160
105 Asn Cys Thr Val Thr Ala Cys Ala Ala Gly Ser Asn Ala Ile Gly Asp
106          165          170          175
108 Ala Phe Arg Leu Val Gln Asn Gly Tyr Ala Lys Ala Met Ile Cys Gly
109          180          185          190
111 Gly Thr Glu Ala Ala Ile Thr Pro Leu Ser Tyr Ala Gly Phe Ala Ser
112          195          200          205
114 Ala Arg Ala Leu Ser Phe Arg Asn Asp Asp Pro Leu His Ala Ser Arg
115          210          215          220
117 Pro Phe Asp Lys Asp Arg Asp Gly Phe Val Met Gly Glu Gly Ser Gly
118 225          230          235          240
120 Ile Leu Ile Leu Glu Leu Glu Ser Ala Leu Ala Arg Gly Ala Lys
121          245          250          255
123 Ile Tyr Gly Glu Met Val Gly Tyr Ala Met Thr Cys Asp Ala Tyr His
124          260          265          270
126 Ile Thr Ala Pro Val Pro Asp Gly Arg Gly Ala Thr Arg Ala Ile Ala
127          275          280          285
129 Trp Ala Leu Lys Asp Ser Gly Leu Lys Pro Glu Met Val Ser Tyr Ile
130          290          295          300
132 Asn Ala His Gly Thr Ser Thr Pro Ala Asn Asp Val Thr Glu Thr Arg
133 305          310          315          320
135 Ala Ile Lys Gln Ala Leu Gly Asn His Ala Tyr Asn Ile Ala Val Ser
136          325          330          335
138 Ser Thr Lys Ser Met Thr Gly His Leu Leu Gly Gly Ser Gly Gly Ile
139          340          345          350
141 Glu Ala Val Ala Thr Val Met Ala Ile Ala Glu Asp Lys Val Pro Pro
142          355          360          365
144 Thr Ile Asn Leu Glu Asn Pro Asp Pro Glu Cys Asp Leu Asp Tyr Val
145          370          375          380
147 Pro Gly Gln Ser Arg Ala Leu Ile Val Asp Val Ala Leu Ser Asn Ser
148 385          390          395          400
150 Phe Gly Phe Gly Gly His Asn Val Thr Leu Ala Phe Lys Lys Tyr Gln
151          405          410          415
153 <210> SEQ ID NO: 3
154 <211> LENGTH: 45

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155 <212> TYPE: DNA  
156 <213> ORGANISM: Synechocystis sp.  
158 <400> SEQUENCE: 3  
159 ggatccgcat gcatggcaaa ttggaaaaag aaacgtgttg ttgta 45  
162 <210> SEQ ID NO: 4  
163 <211> LENGTH: 38  
164 <212> TYPE: DNA  
165 <213> ORGANISM: Synechocystis sp.  
167 <400> SEQUENCE: 4  
168 ggatccaagc ttctattgat attttttgaa agctaagg 38  
171 <210> SEQ ID NO: 5  
172 <211> LENGTH: 33  
173 <212> TYPE: DNA  
174 <213> ORGANISM: Cuphea hookeriana  
176 <400> SEQUENCE: 5  
177 ctgagatctg tcgacatggc gaccgcttct cgc 33  
180 <210> SEQ ID NO: 6  
181 <211> LENGTH: 30  
182 <212> TYPE: DNA  
183 <213> ORGANISM: Cuphea hookeriana  
185 <400> SEQUENCE: 6  
186 gacagatctt gtggagactt cctgtgcagg 30

VERIFICATION SUMMARY

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L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date